

Application No. 10/713,120  
Amendment dated September 27, 2006  
Response to Office Action of June 1, 2006

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Please cancel claims 1-5 without prejudice

Amend claims 6, 9 - 21, as shown below.

Add claim 22-25 as shown below.

1. (cancelled)

2. (cancelled).

3. (cancelled)

4. (cancelled)

5. (cancelled).

6. (currently amended) A method for producing an electric heating cloth which is heated uniformly and is characterized by high reliability and high flexibility comprising the

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steps of: interweaving a first group of flexible non-conducting threads arranged in a first direction with a single second group of flexible heating resistive threads arranged in a second perpendicular direction which is perpendicular to said first direction, each of said single second group of heating resistive threads characterized by a shell-nucleus structure wherein said nucleus is made of twisted flexible synthetic or glass fiber or fibers, said shell formed by dissolving a thermoplastic polymer in an organic solvent; adding an industrial carbon which is produced from acetylene to form a first mixture; grinding said first mixture; adding a colloidal graphite to said first mixture of thermoplastic polymer and organic solvent to form a second mixture; grinding said second mixture; coating a thread with said second mixture in a spinneret; and heating said coated thread coated heating resistive thread to remove said organic solvent.

7. (original) The method according to claim 6 wherein said thermoplastic polymer is polyvinylidene.

8. (original) The method according to claim 6 wherein said organic solvent is acetone.

9. (currently amended) The method according to claim 6 wherein said thermoplastic polymer is dissolved in said organic solvent in a ratio of about one mass part

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of said polymer to ~~about~~ six mass parts of solvent.

10. (currently amended) The method according to claim 6 wherein said industrial carbon is added to said thermoplastic polymer and said organic solvent in a ratio of ~~about~~ one mass part of said industrial carbon to ~~about~~ 2 two mass parts of said thermoplastic polymer.

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11. (currently amended) The method according to claim 6 wherein said thread is a polyester thread of ~~about~~ 35 gauge AWG.

12. (currently amended) The method according to claim 6 wherein said thread is coated with said second mixture at ~~about~~ 20 °C and said thread is coated in said spinneret at a pulling speed of ~~about~~ 25 m/sec. m/min.

12. 13. (currently amended) The method according to claim 11 wherein said thread has ~~about~~ 40 twists per meter (~~linear density: 28.6 tex (.0286 g/m)~~ and a linear density of .0286 g/m.

13. 14. (currently amended) The method according to claim 6 wherein said coated thread is dried in a hot air stream at ~~about~~ 105 -110 °C.

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14. 15. (currently amended) The method according to claim 6 wherein said thermoplastic polymer is dissolved in said organic solvent in a ratio of one mass part of polymer to ~~about~~ seven mass parts of solvent.

15. 16. (currently amended) The method according to claim 6 wherein said industrial carbon is added to said thermoplastic polymer and said organic solvent in a ratio of ~~about~~ 5 five mass part parts of said industrial carbon to ~~about~~ 20 twenty mass parts of said thermoplastic polymer.

16. 17. (currently amended) The method according to claim 6 wherein said thermoplastic polymer is dissolved in said organic solvent in a ratio of one mass part of polymer to ~~about~~ 6.5 six and a half mass parts of solvent.

17. 18. (currently amended) The method according to claim 6 wherein said industrial carbon is added to said thermoplastic polymer and said organic solvent in a ratio of ~~about~~ 5 five mass part parts of said industrial carbon to ~~about~~ 20 twenty mass parts of said thermoplastic polymer.

18. 19. (currently amended) The method according to claim 6 wherein said thread

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is a twisted glass thread of ~~about~~ 20 gauge, 45 twists per meter (linear density: to tex (.050 g/m)) and is pull in said spinneret at a speed of ~~about~~ 15 m/min..

19. 20. (currently amended) A method for producing an electric heating cloth which is heated uniformly and is characterized by high reliability and high flexibility comprising the steps of: interweaving a first group of non-conducting threads arranged in a first direction with a single second group of heating resistive threads, each of said single second group of heating resistive threads formed by dissolving a thermoplastic polymer in an organic solvent; adding an industrial carbon to said solution of thermoplastic polymer and organic solvent to form a first mixture; grinding said first mixture; adding a colloidal graphite to said first ~~product~~ mixture to form a second mixture; grinding said second mixture; coating a nucleus made of twisted flexible synthetic or glass fiber or fibers with said second mixture in a spinneret; and drying said coated thread to remove said organic solvent.

20. 21. (original) The method according to claim 49 20 wherein said industrial carbon is produced from acetylene.

22. (new) The method according to claim 6 wherein each of said second group of

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heating conductive resistive threads has an outer diameter of less than 0.7 mm

23. (new) The method according to claim 6 wherein said interwoven threads are arranged in multiple heating zones.

24. (new) The method according to claim 6 wherein each of said heating resistive threads has a linear resistance in the range of 2.7 -1800 Ohm/cm.

25. (new) The method according to claim 6 wherein said interwoven non-conducting threads and said heating conducting resistive threads have linear densities of about 8-18 threads per centimeter of said cloth.